

REMARKS

Claims 1-26 are pending in the current application.

Claim Rejections 35 USC 103

Claims 1-26 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlin (U.S. Pat. 5,199,031) in view of Raith (U.S. Pat. 5,729,531) and further in view of Giusto (U.S. Pat. 3,914,695). The Examiner asserts that Raith discloses (column 12, lines 29-36) a modulation control device that uses phase to identify a call, a mobile and a frequency channel. Applicant respectfully disagrees with the Examiner's characterization of Raith and its application to the present invention.

The cited passage (column 12, lines 29-36) makes reference to the identification of a particular **type** of mobile and not the identification of a mobile associated with a **call**. Raith assigns mobile stations to a packet channel but a mobile station may have less transmission capability and receiving capability than a channel. (see column 12, lines 25-29) A mobile station may include an identifier indicating the rate associated with the mobile station: a full-rate, double-rate and triple-rate mobile station. (see column 12, lines 6-8) When a full-rate mobile station is assigned to a triple rate channel, the mobile station may have problems communicating with a communication system. The cited passage (column 12, lines 29-36) mentions that a full-rate mobile can only listen to one of three slots. That is, there are three possible phases or slots (slot 1, slot 2 and slot 3). A double rate mobile operates on two of the three possible slots (slots 1 and 2, slots 2 and 3, and slots 1 and 3). In other words, Raith employs a technique that identifies a **type** of mobile (rate) but not a mobile of a call as in the claimed invention.

Moreover, the identification technique in Raith does not last for the duration of a call as in the claimed invention. Raith discloses a technique for reassigning mobile stations a new phase within a channel. Initially, it applies a general allocation method to evenly distribute the mobile stations on the available channels. After the mobile units are communicating, it reassigns the phase of some mobile stations on a channel which has become heavily loaded. In other words, Raith is not able to assign a phase to a mobile

station for the duration of a call because it **reassigns** phases to mobile stations based on the channel load during a call. In contrast, in the claimed invention, the modulation parameter (phase) is assigned to the call for the duration of the call. Thus, Raith fails to disclose the claimed invention for at least these reasons.

Moreover, Applicant respectfully submits that neither Dahlin, Raith nor Giusto nor their combination teach or suggest the claimed invention. In particular, Dahlin fails to teach or suggest a technique for increasing “the capacity of wireless communication” by assigning a modulation parameter to a call of a mobile and using at least the modulation parameter to modulate the call and using the modulation parameter to identify the call, the mobile and the frequency channel as recited in claim 1 of the present invention. The Dahlin system discloses a technique for identifying control channel time slots. In particular, the system converts existing traffic channels and assigns them to dedicated control channels used for control signaling. As a result, the system of Dahlin actually **reduces the capacity** of a communication network because it transforms existing traffic channels to control channels thereby reducing the number of traffic channels available for call communication. In sharp contrast, the claimed invention “increases the capacity of wireless communication network.” Thus, Dahlin fails to teach or suggest a system that “increases the capacity of wireless communication network” as recited in claim 1.

In addition, Raith fails to teach or suggest a technique for increasing “the capacity of wireless communication” by modulating calls using a modulation parameter as recited in claim 1. As explained above, Raith discloses a technique for reassigning mobile stations a new phase within a channel. Initially, it applies a general allocation method to evenly distribute the mobile stations on the available channels. After the mobile units are communicating, it changes the phase of some mobile stations on a channel which has become heavily loaded. In other words, Raith does **not** increase the capacity of the network - it simply reassigns phases to mobile stations based on the channel load. In sharp contrast, the claimed invention “increases the capacity of wireless communication network.” Thus, Raith fails to teach or suggest a system that “increases the capacity of wireless communication network” as recited in claim 1.

Furthermore, there is no suggestion or motivation to combine the teachings of Dahlin, Raith and Giusto. For example, both Dahlin and Raith fail to teach a technique that "increases the capacity of wireless communication network" as recited in claim 1. Assuming arguendo that there was some motivation to combine the teachings of Dahlin and Raith, all that would result is a system that **decreases** the capacity of a wireless network.

Independent claim 17 recites a method that includes features similar to those of system claim 1. Claim 17 should be allowable for at least the same reasons as claim 1. Moreover, claims dependent on claim 1 and 17 should be allowable for at least the same reasons as their respective base claims.

Request for Reconsideration pursuant to 37 CFR 1.111

Having responded to each and every ground for objection and rejection in the Final Office Action mailed on August 26, 2004, Applicant requests reconsideration in the instant application pursuant to 37 CFR 1.111 and requests that the Examiner allow claims 1-26 and pass the application to issue. In addition, a one-month extension of time is being submitted. Please charge the fee for the one-month of extension of time to our Deposit Account No. 50-1561, and reference Attorney Document No. 29633.044800. If there are any additional fees due, please charge any such fees to the above Deposit Account. If there is any point requiring further attention prior to allowance, the Examiner is asked to contact Applicants' counsel who can be reached at the telephone number listed below.

Respectfully,

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